

# SIGA-REL Releasing Module



# Releasing Module

## Applications

- Water\foam\sprinkler
  - pre-action
  - deluge
  - foam
- Agent/gas release
- No squibs

## Agency Listings

- EST3, EST2
- ULI, ULC, FM, CSFM, MEA, LPC, CE

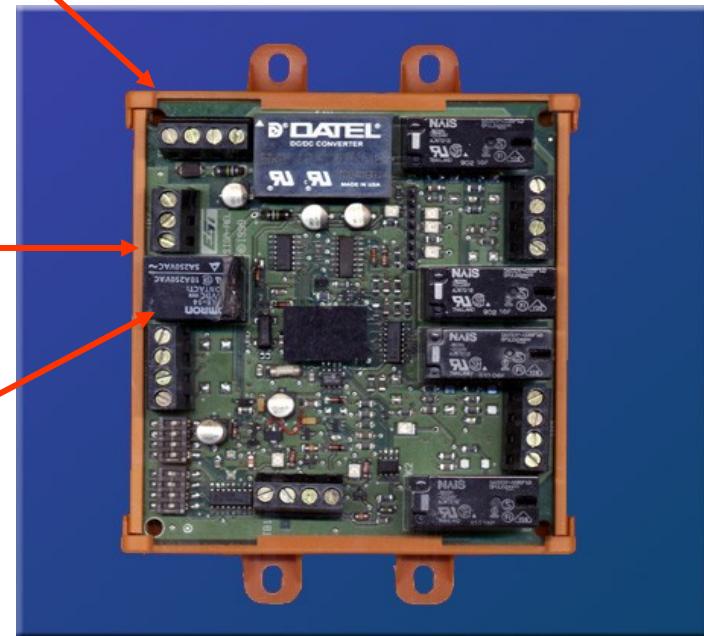
SQUIBS

A large red circle with a diagonal slash through it is positioned over the word "SQUIBS".

# Releasing Module

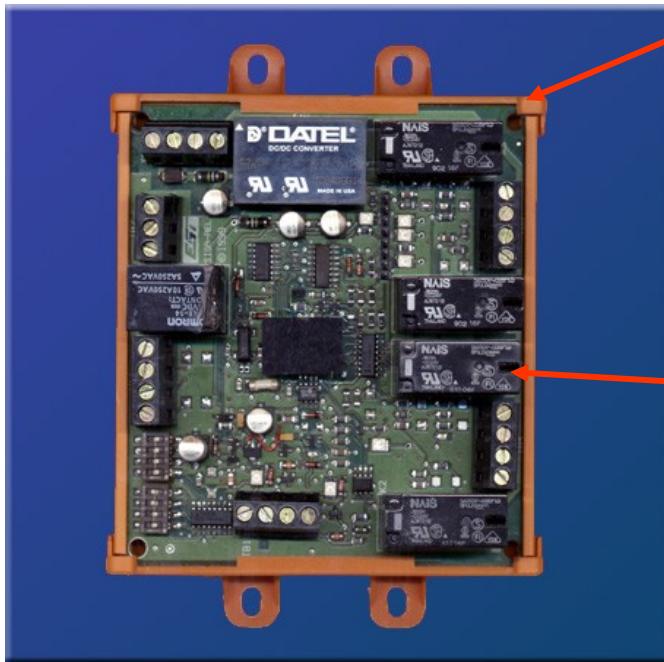
## Features

- **1 form C auxiliary (1st alarm) room prep relay contact (3A @ 24Vdc, resistive load)**
- **1 supervised manual release station circuit for NO contact**
- **1 supervised abort circuit for NO contact**



# Releasing Module

## Features (cont'd)

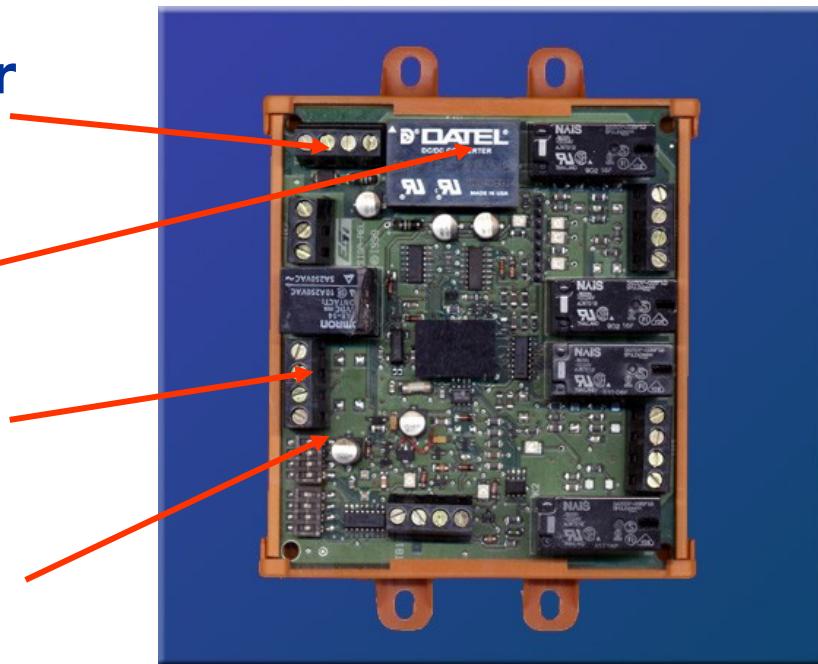


- **2 supervised class B pre-release alarm circuits (3A@24Vdc)**
  - one steady for audible or visual signal; one pulsed for audible signal
- **2 supervised class B release circuits (3A@24Vdc)**

# Releasing Module

## Features (cont'd)

- **Input power from riser = 4A@24Vdc (power limited)**
- **Input / output socket for front panel display / key switch (future)**
- **Operating timers set with dip switches**
- **Operating modes set with dip switches**



# Releasing Module

## Normal state

- **Supervises releasing device and release circuit wiring**
- **Supervises wiring of pre-release alarm circuit**
- **Open or short initiates TROUBLE condition**
  - **Short circuit prior to operation of pre-alarm, release, or output circuit inhibits the output operation**
  - **Short circuit on one pre-release, release, or output circuit does not inhibit operation of the other**

# Releasing Module

## Automatic operation

- Sequence begins with 1st alarm from detector in protected area
- Pre-release alarm audible circuits activate at 15ppm (slow rate)
- Pre-release alarm visual circuits activate at steady rate
- Auxiliary relay contacts activate

# Releasing Module

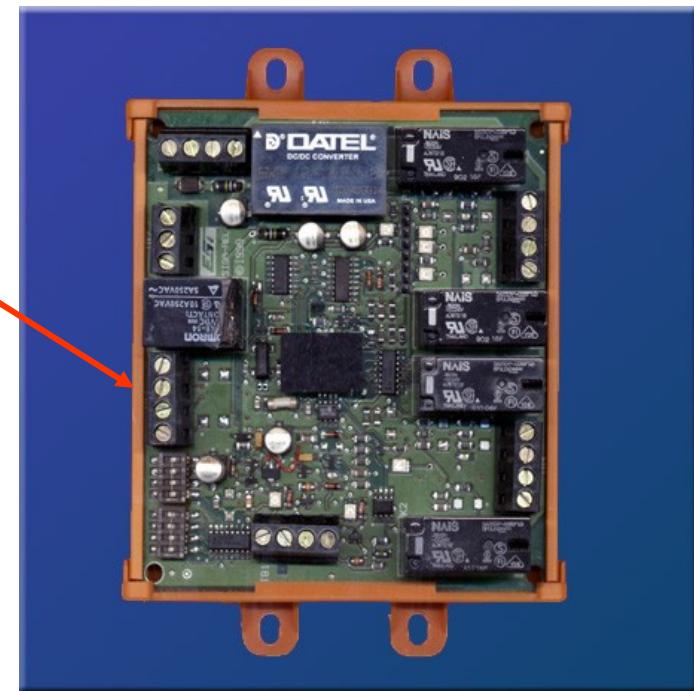
## Automatic operation (cont'd)

- **Alarm from 2nd detector initiates automatic delay timer (0-60 sec, adjustable)**
- **Pre-release alarm audible circuits change to 60ppm (fast rate) then to steady at 10sec mark**
- **Release circuits activate upon expiration of automatic delay timer**
  - when release occurs, pre-release alarm circuits continue operating at steady

# Releasing Module

## Abort operation

- 4 abort modes
- mode determined by dip switches



# Releasing Module

## **Abort operation: mode 1 (default)**

- **Automatic delay timer continues to run while abort is active**
- **Release is prevented if abort is initiated before automatic delay timer expires**
- **If abort is restored, release occurs when automatic delay timer expires or, abort delay timer (0 or 10sec, selectable) expires, whichever occurs last**

# Releasing Module

## Abort operation: mode 2

- Automatic delay timer stops running
- Automatic delay timer resumes when abort is restored
- Release is prevented if abort is initiated before automatic delay timer expires
- Release occurs when automatic delay timer expires

# Releasing Module

## Abort operation: mode 3 (IRI)

- A recognized abort disables the automatic delay timer
- To be recognized, abort must be active when the automatic command (2nd alarm) is received
- If abort is restored, release occurs when abort delay timer (10sec, default) expires

# Releasing Module

## **Abort operation: mode 4 (Int'l.)**

- The automatic delay timer stops running
- Automatic delay timer resets when abort is restored; timing commences from beginning ( $t=0$ )
- Release is prevented if abort is initiated before automatic delay timer expires
- Release occurs when the automatic delay timer expires

# Releasing Module

## Manual operation

- **Sequence begins when manual release station is activated**
  - manual release disables any automatic operation or abort function
- **Pre-release alarm circuits activate at 60ppm (fast rate) then steady rate at 10sec; auxiliary relay contacts activate**

# Releasing Module

## **Manual operation (cont'd)**

- **Manual release timer starts (0, 10, 20, 30sec, selectable)**
- **Release circuits activate when the manual release timer expires**

# Releasing Module

## Accessories

- Abort switch
- Manual release station
- Service disconnect switch
- Releasing circuit end-of-line device

